Proposed SMS Rule Ecology/EPA Discussion Topics for June 14, 2012 Meeting

Issue #1

SMS Part V: Promulgation under the Model Toxics Control Act, the Water Pollution Control Act, or both?

Background: The SMS rule contains five separate parts:

- Part 1: Establishes the authority and purpose of the rule.
- Part II: Establishes definitions.
- Part III: Establishes the "sediment quality standards" which is the ultimate environmental goal for sediment quality and results in no adverse effects to human health and the environment.
- Part IV: Establishes protective requirements for NPDES permitted dischargers and dredge disposal.
- Part V: Establish standards for cleanup of contaminated sediment. Cleanup standards may be established between the sediment quality standard (no adverse effects level) and the cleanup screening level (minor adverse effects level).

The SMS was promulgated under both the Model Toxics Control Act (MTCA) Chapter 70.105D RCW and the Water Pollution Control Act (WPCA) Chapter 90.48 RCW, which included Part V Section -570 Establishing Cleanup Standards.

Issue: Ecology is proposing revisions to Part V of the SMS rule that applies to establishing standards for cleanup of contaminated sediment as well as Part II, Definitions as they apply to Part V to clarify requirements for conducting cleanup of contaminated sediment. Since the EPA has initially determined that certain sections of the proposed SMS rule (Part V) may need approval as water quality standards, Ecology is considering options for separating MTCA and WPCA authority as they may apply to the proposed revisions.

Questions:

- 1) Do the agencies wish to proceed with EPA approval of cleanup criteria?
- 2) How can/should we proceed with the SMS rule revisions if promulgated under MTCA or CWA authority?
- 3) Is it legally defensible to separate Part V of the SMS rule and limit promulgation under MTCA authority?
- 4) If Ecology limited Part V to MTCA authority for cleanup, what are the implications for Ecology's NPDES permit delegation authority and water quality standards?
- 5) Is there language Ecology can add to section 173-204-500 (this section details the cleanup decision process and expectations see Attachment #1) of the SMS rule that resets and limits applicability of Part V to cleanup under the MTCA law?

Issue #2 MTCA "Natural Background" clause versus EPA "Natural Conditions" policy

Background: The MTCA rule has a clause that cleanup standards based on risk to human or ecological health cannot be above "natural background". The MTCA natural background definition (WAC 173-340-200) is as follows:

"the concentration of hazardous substance consistently present in the environment that has not been influenced by localized human activities. For example, several metals and radionuclides naturally occur in the bedrock, sediments, and soils of Washington state due solely to the geologic processes that formed these materials and the concentration of these hazardous substances would be considered natural background. Also, low concentrations of some particularly persistent organic compounds such as polychlorinated biphenyls (PCBs) can be found in surficial soils and sediment throughout much of the state due to global distribution of these hazardous substances. These low concentrations would be considered natural background. Similarly, concentrations of various radionuclides that are present at low concentrations throughout the state due to global distribution of fallout from bomb testing and nuclear accidents would be considered natural background."

Issue:

- 1) The MTCA definition includes both natural and anthropogenic chemicals from natural and anthropogenic sources that are globally distributed. The WPCA definition (WAC 173-201A-020) of "natural conditions" or "natural background levels" refers to "surface water quality that was present before any human-caused pollution...." This definition is the accepted definition for EPA's policy on natural conditions in the WQS program.
- 2) MTCA and the revised SMS proposal allow "natural background" and "regional background" to trump the human health risk criteria for establishing cleanup standards. However, EPA's WQS policy is that natural conditions cannot be used for human health unless it can be shown that human health designated uses are protected (See Attachment #2).

These two concepts appear to be in conflict.

Questions:

- 1) Is there a legal interpretation or mechanism to alleviate this potential conflict?
- 2) Can the agencies make a policy decision on how to harmonize the cleanup and water quality provisions under MTCA, CWA and WPCA regarding anthropogenic and non anthropogenic background? Therefore, how would these two different definitions be implemented in the two programs?
- 3) How can natural conditions be implemented for human health in a manner that is protective of designated uses?

Issue #3

TMDL process and 303(d) listings for water and sediment under the WPCA and SMS

Background: Because the SMS was promulgated under both MTCA and the WPCA, EPA has decided that Ecology must establish a 303(d) list for impaired sediment. In 2006, Ecology developed WQP Policy 1-11 that applied to both water and sediment 303(d) listings (see Attachment #3).

In this policy, for sediment listings in Category 5 (Impaired) and 4B (Has a Pollution Control Project), the agency generally defers to the cleanup program to establish the list. Section 8.c. (pages 26-29) establish the process for sediment 303(d) listing. In addition, contaminated sediment sites that have an approved Cleanup Action Plan or Record of Decision are placed in Category 4B and these sediments are not part of the 303(d) list.

Issue: The agencies need to further discuss the intersection of TMDLs, 303(d) listings for water and sediment, and sediment cleanup. Ecology recently had an internal meeting to discuss the Spokane River TMDL process and how it intersects with the SMS/cleanup and are working on defining these issues, identifying additional questions for further discussion with EPA, and a proposed path forward. Ecology and the EPA will meet and include the TMDL, 303(d) listing, and WQS/SMS staff for further discussion. At a minimum, these staff may include: Matt Szelag, Laurie Mann, Jill Gable, Cheryl Niemi, Susan Braley, and Kathy Taylor.

Questions:

- 1) Does our current WQP Policy 1-11 ensure protection of the designated use when establishing sediment cleanup standards and water quality standards for impaired water bodies?
- 2) How do we coordinate the different authorities (MTCA/WPCA/CWA) when conducting and implementing a TMDL for a listed waterbody? Specifically, what types of dischargers get allocations, how can cleanup and water quality standards work in a TMDL, what role do stormwater dischargers play to protect both water and sediment quality in a TMDL?
- 3) How can implementation work for both programs if the SMS has a different FCR than the WQS? How will different targets in the SMS and WQS be addressed if the WQS designated uses are applicable?
- 4) In addition, how can the concept of a range of cleanup standards between the maximum allowable level and the sediment cleanup objective fit into the existing construct of WQS? See Attachment #4 which illustrates how cleanup standards are established under the proposed rule. The existing SMS has a range of cleanup standards and the sediment cleanup objective (lower tier) was the standard previously approved by EPA.
- 5) Since cleanup standards need to be met in 10 years, is there a corresponding WQS mechanism that needs to be enacted for compliance with WQS?

Issue #4

Endangered Species Act consultations: Separation of SMS sections for consultation with different timelines

Background: The entirety of the SMS was originally promulgated under both MTCA and the WPCA then EPA subsequently made a policy decision that limited this approval to certain sections of the SMS rule. For the current SMS rule revision effort, the EPA has conducted a cursory review of the proposed revisions that are limited to Part V, and may consider portions of Part V to be water quality standards.

Issue: Since the EPA has initially determined that certain sections of the proposed SMS rule (Part V) may need approval as water quality standards, EPA's action is subject to ESA consultation. In order to address this potential determination, we are considering options to make the consultation process more efficient. One likely possible scenario to explore is EPA acting on the human health criteria section first, while waiting for ESA consultation to be completed on the remaining sections before acting on those sections.

Questions:

- 1) Can separate ESA consultations on different tracks be conducted on Part V of the revised SMS rule? For example, can separate consultations be conducted on:
 - Aquatic life criteria in sections:
 - o -562 (benthic macro invertebrate protection marine criteria),
 - o -563 (benthic macro invertebrate protection freshwater criteria),
 - -564 (protection of other species, such as acute and chronic toxicity to higher trophic levels).
- 2) If separate consultations are possible, are the sections in Part V that EPA considers water quality standards framed for separate consultation? If not, are there structural changes that do not affect substantive requirements that can be made to facilitate separate consultations? Or are the definitions and construct of the SMS rule too intertwined for EPA to take action on the human health criteria prior to completing ESA consultation on the remainder of the SMS revisions?

List of attachments:

- #1: Proposed SMS rule Section WAC 173-204-500 Cleanup decision process.
- #2: 1997 EPA Tudor Davies memo "Natural conditions" policy.
- #3: WQP Policy 1-11 can be accessed at: http://www.ecy.wa.gov/programs/wq/303d/wqp01-11-ch1Final2006.pdf
- #4: Proposed SMS rule flowchart Sections WAC 173-204-560 through -564 Sediment cleanup standards framework.